

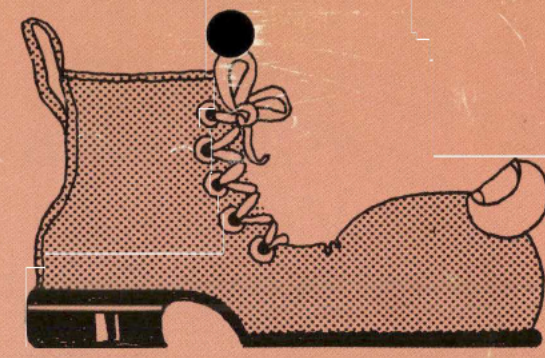
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# THE ALCOA NEWS

FEBRUARY 1972

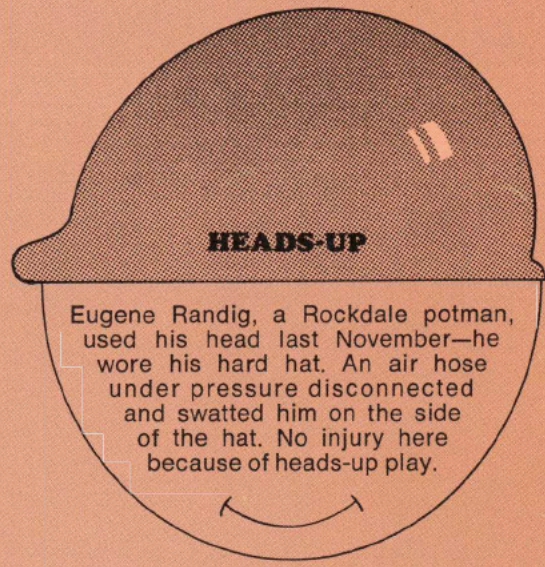
## BACK FOR MORE



While working on a forging press recently Cleveland Alcoa Tazzerall Pitts was sideswiped by a

200-pound valve. The force of the fall ripped the leather from Tazzerall's safety shoe, but his foot escaped injury. A firm believer in safety equipment, Tazzerall bought another pair of safety shoes the same day.

## Scraps & Blisters "Zeroing In On Safety"



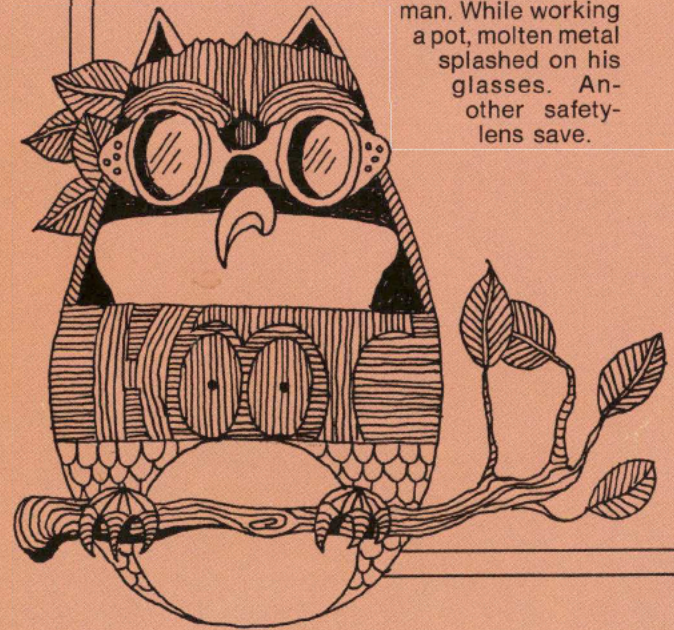
Eugene Randig, a Rockdale potman, used his head last November—he wore his hard hat. An air hose under pressure disconnected and swatted him on the side of the hat. No injury here because of heads-up play.

## Wise Owls

Rod Bailey and Wesley Huffman have learned that when it comes to wearing safety glasses, "seeing is believing."

Rod, who works in Rockdale Works' carbon rodding area, saved his left eye twice within as many months. Both times, he was driving a tractor in the potroom when something struck his left lens with enough force to shatter his safety glass.

A new Wise Owl at Wenatchee Works is potman Wesley Huffman. While working a pot, molten metal splashed on his glasses. Another safety-lens save.



THE ALCOA NEWS  
1501 Alcoa Building  
Pittsburgh, Pa. 15219

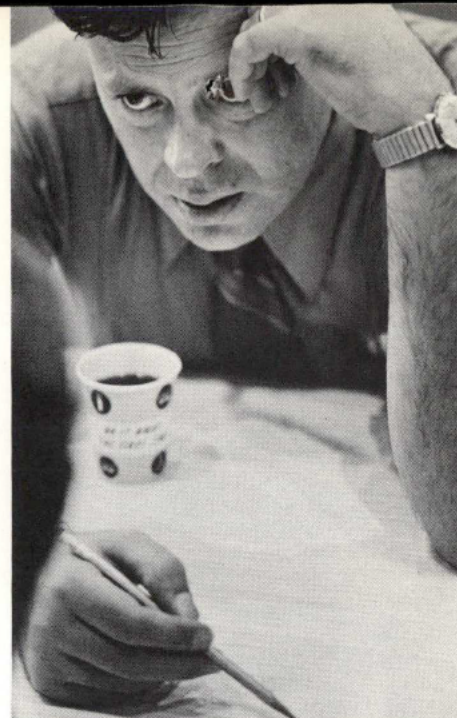
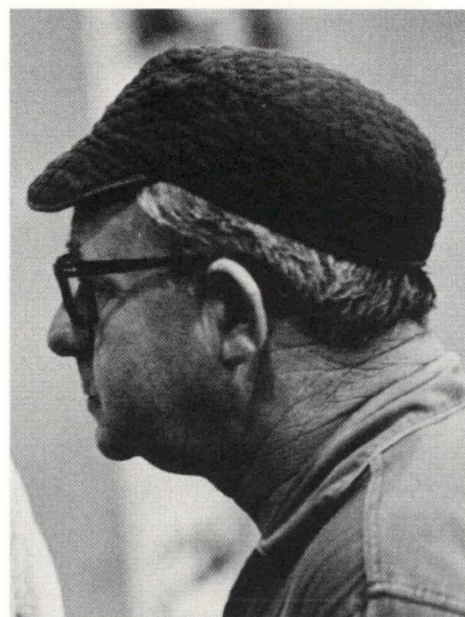
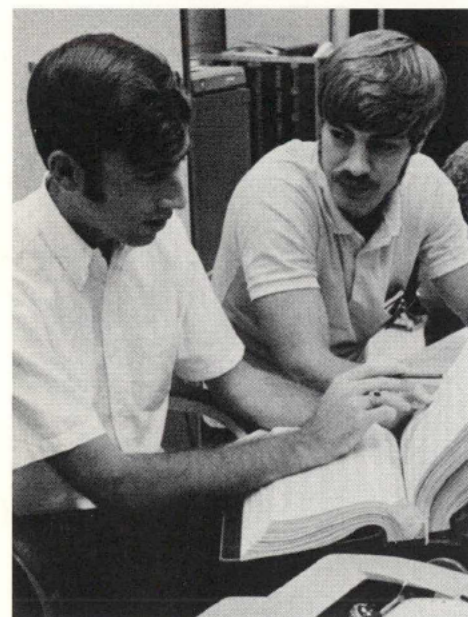
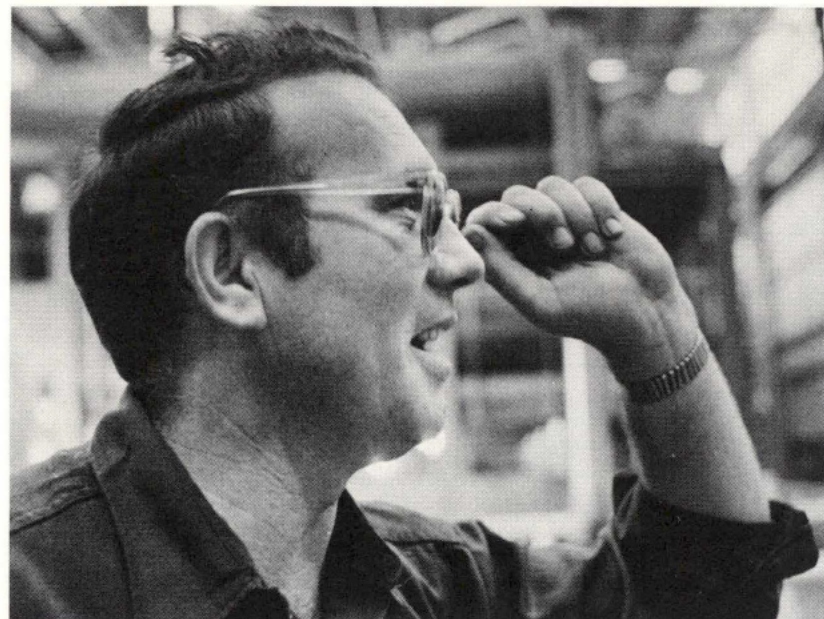
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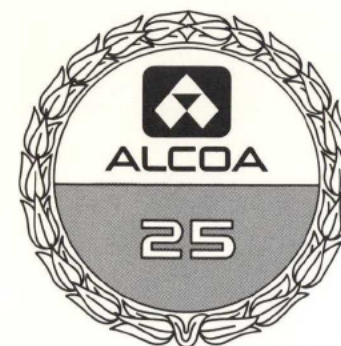




# TO ALL ALCOANS



(b) (6)



First Membership November 26, 1913  
Membership on February 1, 1972—22,398

## The 25 Year Club

(b) (6)



## News Briefs

**Organization Changes** • *Edward R. Merkl*, formerly a member of Pittsburgh's industrial relations division, has become personnel manager at Tennessee Operations.

*Keith Smykil*, formerly on the organization and compensation staff in Pittsburgh, has become personnel manager at Lebanon Works.

**District Sales Manager** • *Norman F. Stephen*, now assistant district sales manager in Chicago, will become district manager in the Dallas sales office on March 1.

**Building Boom** • Where will Alumiframe be by 1985? We're going after a market of 10 percent of residential building in the U.S. by then.

The objective is based on initial market response to Alcoa's Alumiframe building system. Introductory sales for 1971 totaled over a half-million dollars. That means framing for more than 629 homes. The system is expected to be used for more than 1200 homes next year and then move rapidly toward becoming an industry standard.

**Lighting the Way** • Alcoa's new Coilzak Lighting Sheet will light the way for motorists traveling through a twin-tube tunnel on Interstate Highway 10—a planned superhighway linking Jacksonville, Fla., with Los Angeles.

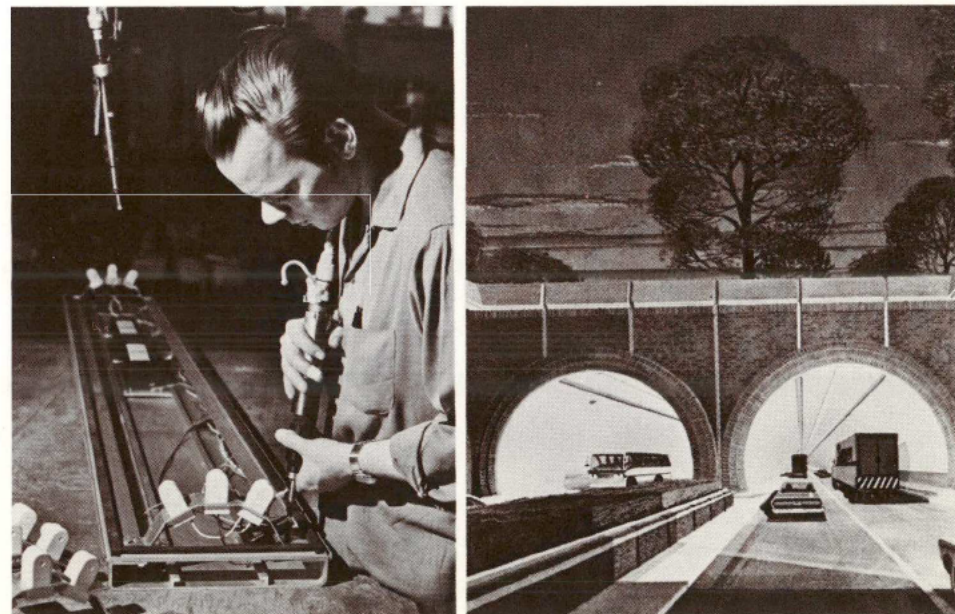
The 4271-foot long Mobile River Tunnel, under construction in downtown Mobile, Ala., will carry four lanes of traffic beneath the river channel.

Each of the 1300 lighting fixtures is made with the highly reflective Coilzak Lighting Sheet. The aluminum itself plus a special finish team up to make the fixtures resistant to salt, air and water.



**Easy to Take** • Relief is on the way for soaring medical costs. A new unit-dose package by Philips Roxane Laboratories, Inc. dispenses liquids at the patient's bedside in premeasured, sealed Alcoa aluminum cups. The new package saves an

average of 20 percent over the glass vials it replaces. The cup, with its peel-away aluminum foil lid, eliminates the time-consuming job of pouring individual doses from large, hard-to-hold bottles.



1971 was a difficult year for Alcoa. Shipments were down, Costs were up. There were layoffs. Profit was disappointingly poor.

To be sure, these facts are discouraging. But with the circumstances we faced, the results would have been much worse except for the dedication and hard work of Alcoa people. By making sacrifices, by accepting difficult changes, Alcoans everywhere helped stave off what could have been a disastrous year.

You and I are part of a top-notch company. And your management intends to keep it that way . . . by continuing to provide a rewarding place to work . . . by providing employees an opportunity for economic and personal growth . . . and, most of all, by improving profit enough to assure our future in a strong, growing company.

We're also part of a company which has never been kept on the mat by a temporary setback. Your continued good work will help make 1972 the kind of year we all want it to be.

*John D. Harper*  
John D. Harper  
Chairman



### Report to Alcoans: 1971

Income (from all sources)	
1970	\$1,556,309,831
1971	\$1,465,409,892
Operating Costs (wages, salaries, employee benefits, materials, services, etc.)	
1970	\$1,347,239,624
1971	\$1,356,223,214
All Taxes (except Social Security)	
1970	\$ 94,810,718
1971	\$ 53,845,062
Profits	
1970	\$ 114,259,489*
1971	\$ 55,341,616

\*Before certain extraordinary items were deducted. There were no such items in 1971.

From Annual Report for Employees Brochure "Report to Alcoans 1971"

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### February 1972

Volume 44 / Number 2

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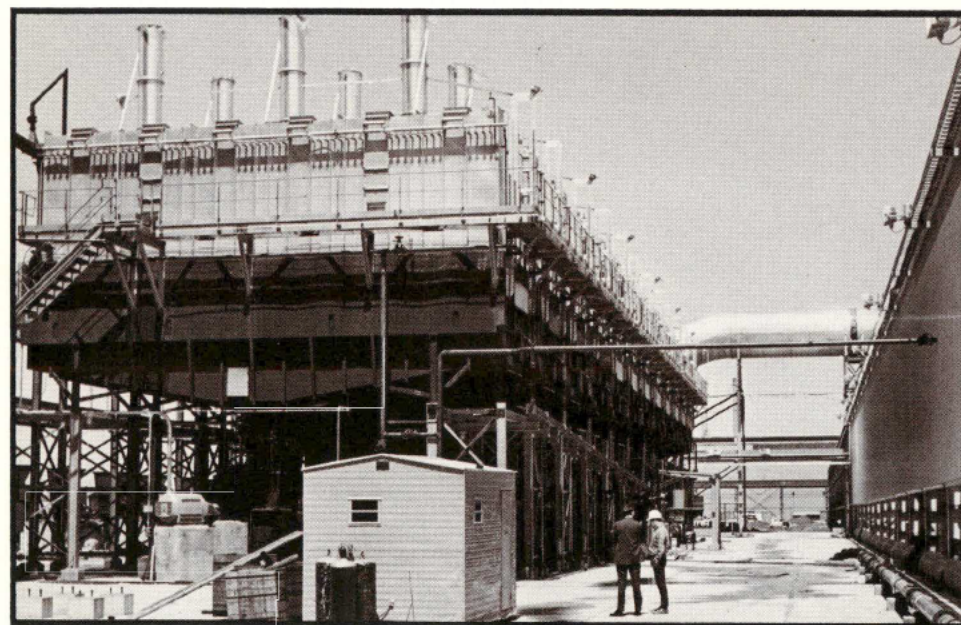
**February Contributors** • The Foreman story first appeared in the *Wenatchee Cascade*, edited by Dick Tatum. Material for the Big Mac and Forging Tree stories was provided by Al Posti, Cleveland Works. "Alcoans This Month" came from Joel Cagwin, Davenport Works and Orline Florey, Mobile Works.

The Alcoa News is published monthly by the public relations department of Aluminum Company of America for employees and their families. It is the purpose of this magazine to promote the success of the company and the well-being of its employees. Readers' comments are invited. Address *The Alcoa News*, 1501 Alcoa Building, Pittsburgh, Pa. 15219.



# THE ALCOA

# 39



Warrick's new Alcoa 398 reactor.



Hooded pots and collection ducts at the Badin (N.C.) smelter.

The good neighbor policy at an increasing number of Alcoa smelters in the U. S. and overseas is more than "a lot of hot air." Wherever the patented Alcoa 398 air pollution control system is on duty, the air leaving the stacks is better than 99 percent free of fluoride contaminants.

Installation of this super-efficiency unit runs as high as 12½ percent of the cost of a new potline. Converting an existing line is generally still more expensive. But Alcoa, aware of its neighborly responsibilities, plans to include the process in new installations and in the modernization of existing facilities.

The Alcoa 398 process serves double duty by conserving resources while cleaning up emissions. In what environmental engineers call a "closed system," it does its job without producing liquid or solid by-products. The process not only keeps fluorides out of the atmosphere, but also recycles this key element right back into the smelting process.

Here's how it works.

At the potlines, where aluminum oxide (alumina) is reduced to molten aluminum, a hooding system picks up the pot exhaust. Similar to the kitchen range hood, the system pulls in large quantities of air which dilute the pot exhaust. At this point, the gas—basically air with some carbon dioxide and only traces of fluoride—is moved through a ductwork system to the reactor.

This is where the action is. The gases are forced through a shallow bed of alumina that moves along the length of the reactor. As these gases pass through, solid fluoride is trapped and gaseous fluoride combines with the sand-like alumina.

From this point, the virtually fluoride-

Write On  
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## Alcoans This Month

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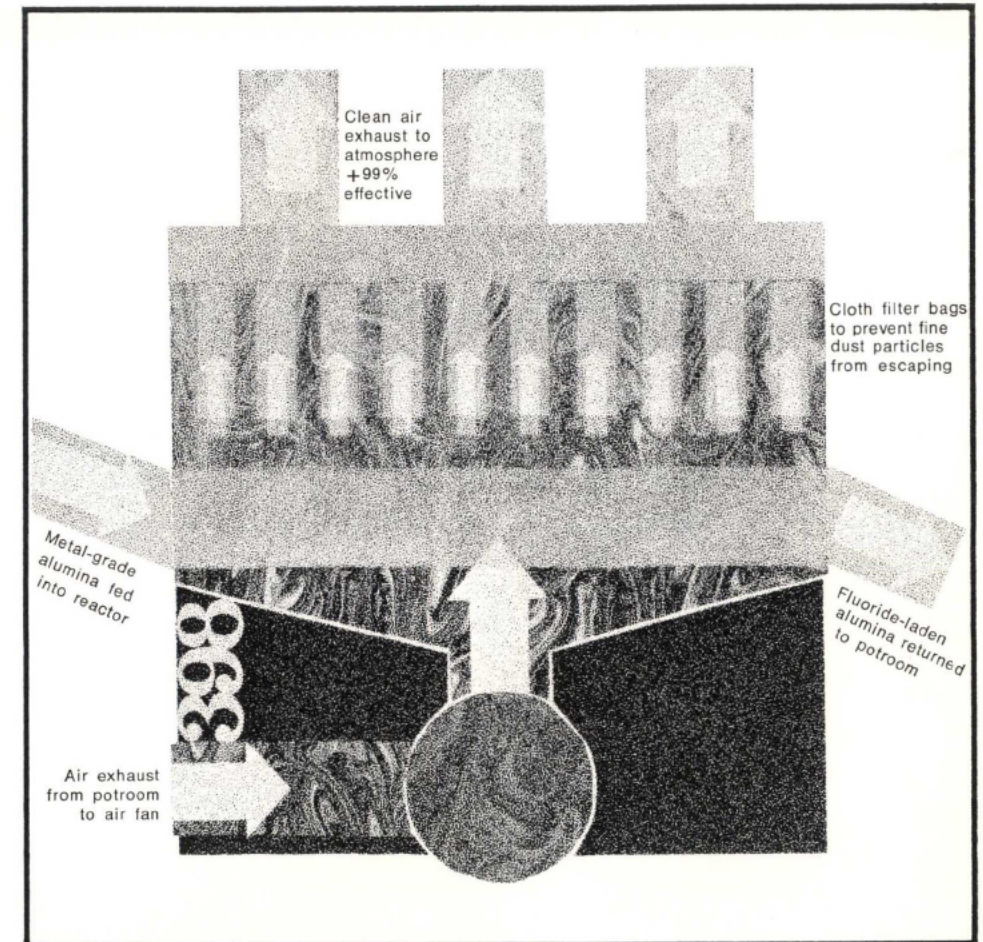
## A GOOD NEIGHBOR

free air passes through filter bags that trap and return fugitive dust. At the same time, the fluoride-laden alumina is conveyed to storage tanks for eventual feeding back into reduction pots.

The Alcoa 398 is the payoff for years of Alcoa research on procedures for the control of fluoride emissions. For three decades, Alcoa has collected scientific data on vegetation and animals around its smelters. Stack emissions are carefully monitored, and the effectiveness of control efforts are checked by sampling surrounding air and analyzing vegetation around these plants.

It's a system that's as reliable as it is efficient. Equipped with enough reserve capacity to take over during breakdowns, it provides atmospheric protection just about 100 percent of the time.

To translate Alcoa's unique technical know-how into new profit opportunities, and to make this superior pollution-control technology available to the entire industry, the company has offered the process under license to all primary producers of aluminum. As a result, Alcoa is now installing the process on a smelter the company is building for the Anaconda Aluminum Company.



Gerald Turnbow (left), process engineer, and Mike Vaughan, process technician, test emissions from the Alcoa 398 stacks at Wenatchee (Wash.) Works.



# The Foreman

## The Man In Between

Right in the middle, that's where he is. He starts earlier and works later than any man reporting to him. He's continually hit with problems. There's no detail too small or so unimportant that it can't mushroom until it shreds his best-laid plans. He spends his time chasing trouble.

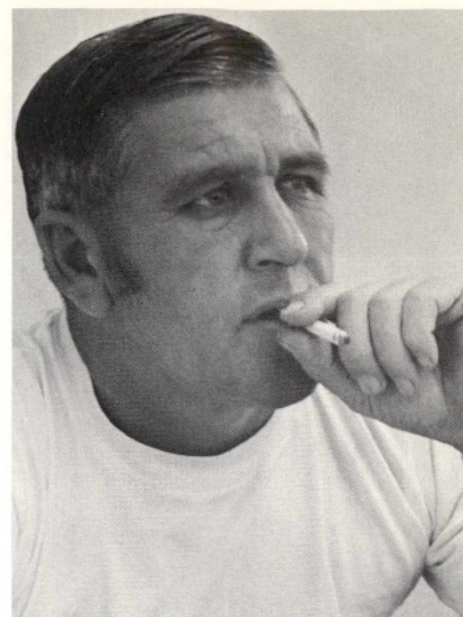
In between, he must keep his temper and his equilibrium . . . and guide, encourage, motivate and assist other individuals of varying temperaments and personalities. At the same time, he's expected to steer smoothly through a sea of Alcoa practices, procedures and operating expectations. And yet, margin for error is small.

Day by day, in the midst of a thousand details, a hundred faces, a multitude of problems . . . it's his job to be right.

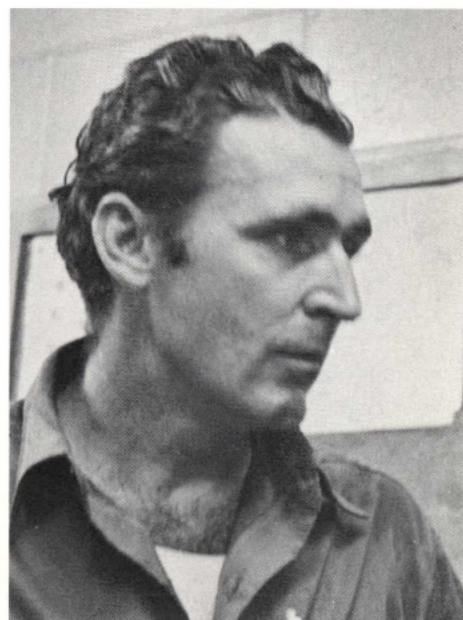
It's a big job.

## What's Foremanship?

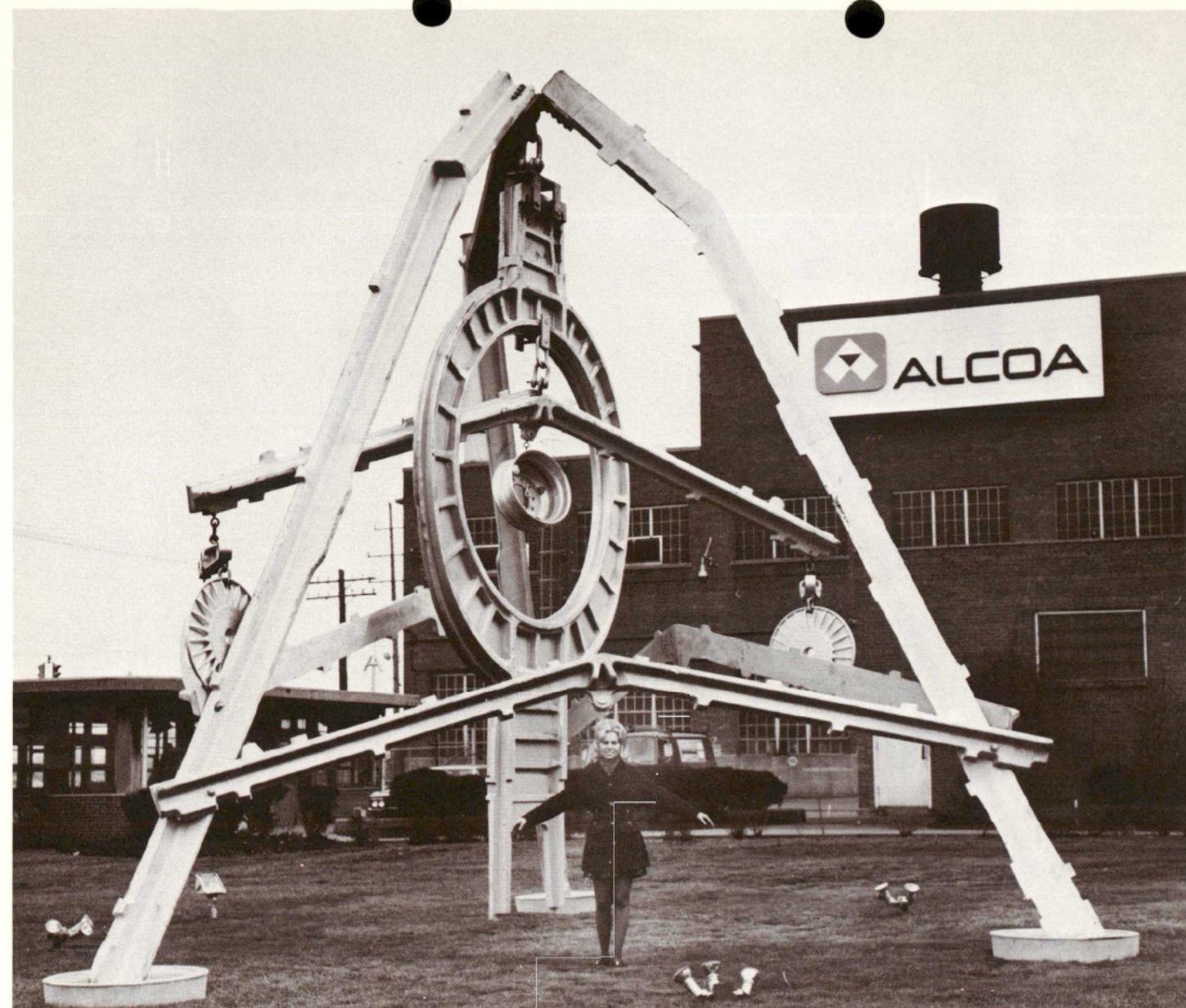
### Eight Wenatchee Works foremen give their views.



**MAX HART, Green Mill Foreman . . .**  
*"The most important part of the job is getting along with others. They can make the job of the foreman tough or easy . . . You have to remember that every man is different, and approach him as an individual. Sure, the job is personally rewarding to me. I enjoy working with a lot of different people. That makes the job more interesting."*



**JOHN NICHOLS, Potrooms Foreman . . .**  
*"There's more to being a foreman than it appears to be. Two important things are—know your potline, how to make it operate as efficiently as you can; and the other, earn the respect of your men. If you have an interest in how they do their work, if you work with them when they have a problem, you'll have a better working crew. I'm proud of the men working for me. I think they do a tremendous job, and they've gone beyond the call of duty many times."*



Carol Ferrette, a Cleveland Works secretary and Alcopod: a Treeation

## A Tree Grows in Cleveland

Late last December, a five-and-one-half ton "forging tree" claimed squatter's rights on the front lawn of the Cleveland (Ohio) Works. And going to work there hasn't been the same since.

There's no way that you can ignore the 25-foot tall assemblage. There's no way that you can keep from commenting on this bigger-than-life collection of aircraft, truck and textile equipment forgings.

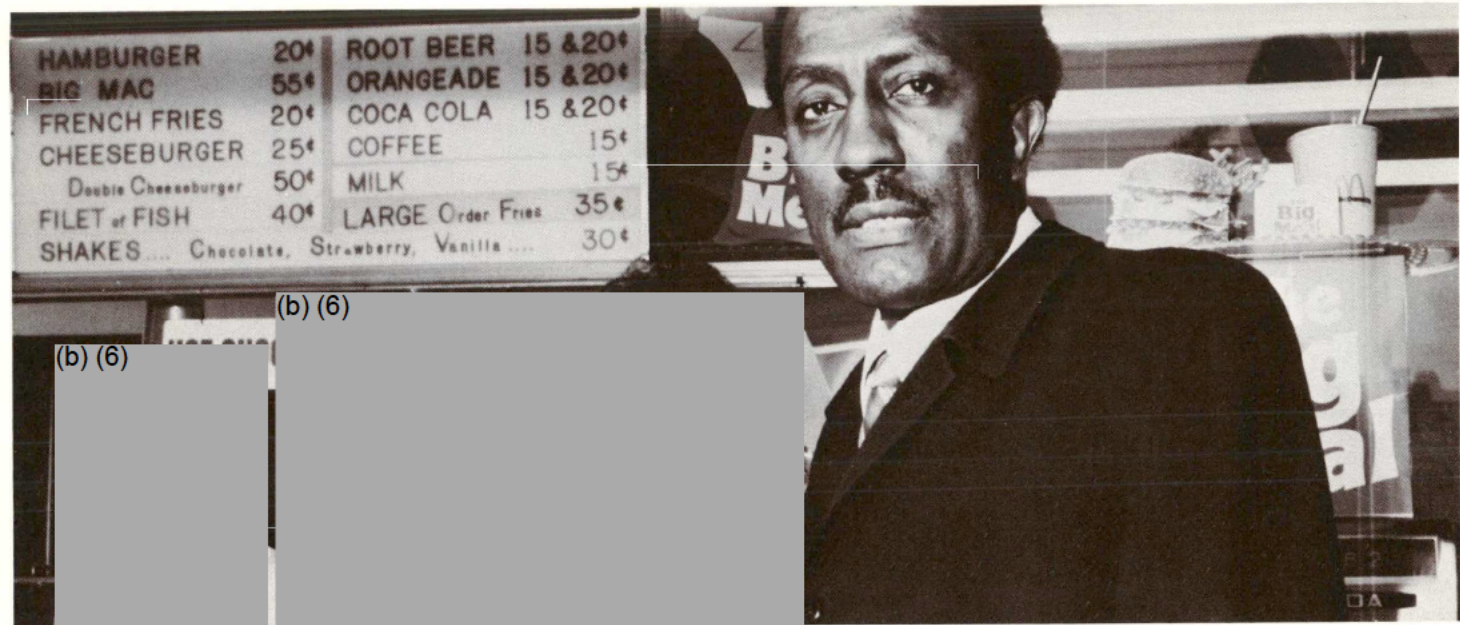
The creative name-calling it inspired soon gave rise to a "Name the Forging Tree" contest. Entries ranged from the patriotic "Spirit of '72" to the tongue-tangling "Presstidigitation." Eventually,

even the judges got into the act by combining the entries of Craig M. Fink, die sinker, and Laurie W. Brown, die designer, to create "Alcopod: A Treeation."

But to George Buis, die sinker, the sculpture is still just plain "Pride." "When I finish a set of dies, I feel a lot of pride. Everyone who had a hand in making those forgings—from the engineers who designed them and the men who forged them, to the maintenance men who kept the presses running—must also feel proud. The forging tree shows that we produce something here that can be made in few other places in the world."



# A Big Mac, Fries and a Shake



For Cleveland Alcoa Albert Branham, the McDonald's jingle "You deserve a break today" means more than a stop for a "Big Mac," fries and a shake. Al hopes to provide another type of break for the nearby black community, particularly its youth.

Al, who works in the oil crib of the forge plant, recently joined with four other blacks to found the Kinsman Development Corporation and purchase a McDonald's fast-food chain franchise in Cleveland.

As treasurer of Kinsman Development Corporation, Al figures the stockholders won't see the first profits for five years. But the immediate payoff is in providing employment and setting an example of black entrepreneurship for the restaurant's 33 employees, who are mostly black teen-agers.

"Most of these young people would be in an unemployment line today if they didn't work for us. Now, many of them are going to college on their earnings," Al declares.

Al emphasizes that "my personal ambition is to have young blacks look up to successful black businessmen in the

same way they look up to black stars in sports and entertainment. The best way I know to do that is by example."

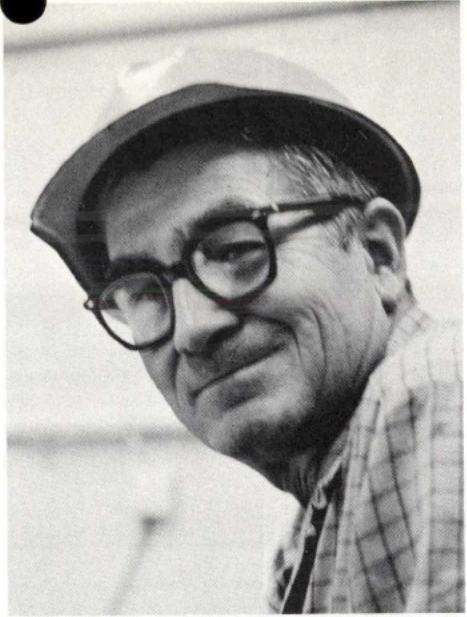
The franchise is not Al's first venture into the business world. He has been a serious investor in the stock and bond markets since joining Alcoa in 1950. He credits his foreman Mitch Zmarzly, and late co-worker (b) (6), with arousing his interest in investments. Says Al, "Every morning they would start talking about what happened in the market the day before. I soon found myself reading up on investments and wrapped up in the same discussions."

When asked which personal trait contributed most to his investment and business success, Al quickly answers, "Tenacity—keeping on top of a situation until something happens. Many times I deposited only 50 or 75 cents before my savings account amounted to anything. It paid off in the end, though."

Professing no hobbies except tending to his new business and investments, Al says his free time is spent serving up "Big Mac" portions of the free enterprise system to the youth of his neighborhood.



**JIM JONES, Ingot Foreman . . .** "There are times when you make mistakes. When you do, you have to learn to accept the responsibility and learn from those mistakes. But, there's personal satisfaction in getting the job done right, and with the least amount of expense."



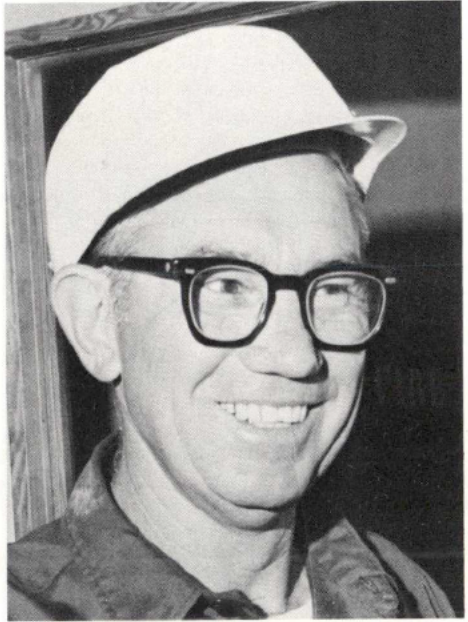
**TED MUNCH, Maintenance Foreman . . .** "Trying to understand your men and knowing the equipment are two important things about being a foreman. Pride in the job is part of it, too. I try to keep my men informed about how business is going, and reflect the company's plans and goals."



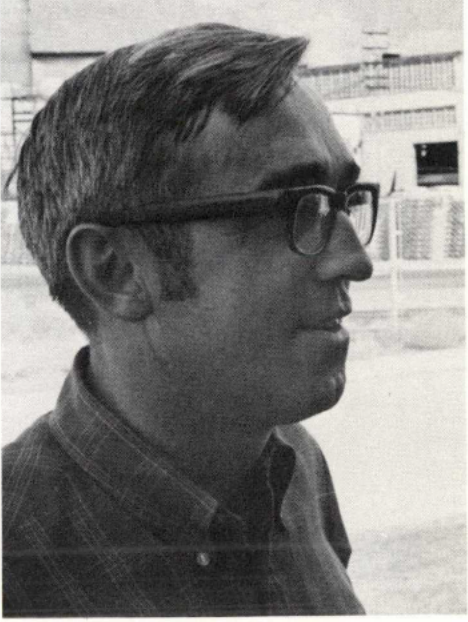
**DAVE WOODS, Potlining Foreman . . .** "We've been fortunate over the years to have some good men . . . guys who don't mind the hot, hard work. They know that part of the job is having a goal to finish each day. We rely on our leadmen, because we're spread out all over the potrooms. Their experience is invaluable in moving each job along. Without them, we'd get a lot less done—and we have a lot to do these days!"



**TROY CHENEY, Shift Supervisor (formerly Potrooms Foreman) . . .** "Knowing your people is the biggest thing. You can work around a machine, but your men have to know what's expected of them . . . If you can show you're interested in getting a good job done, they'll do it."

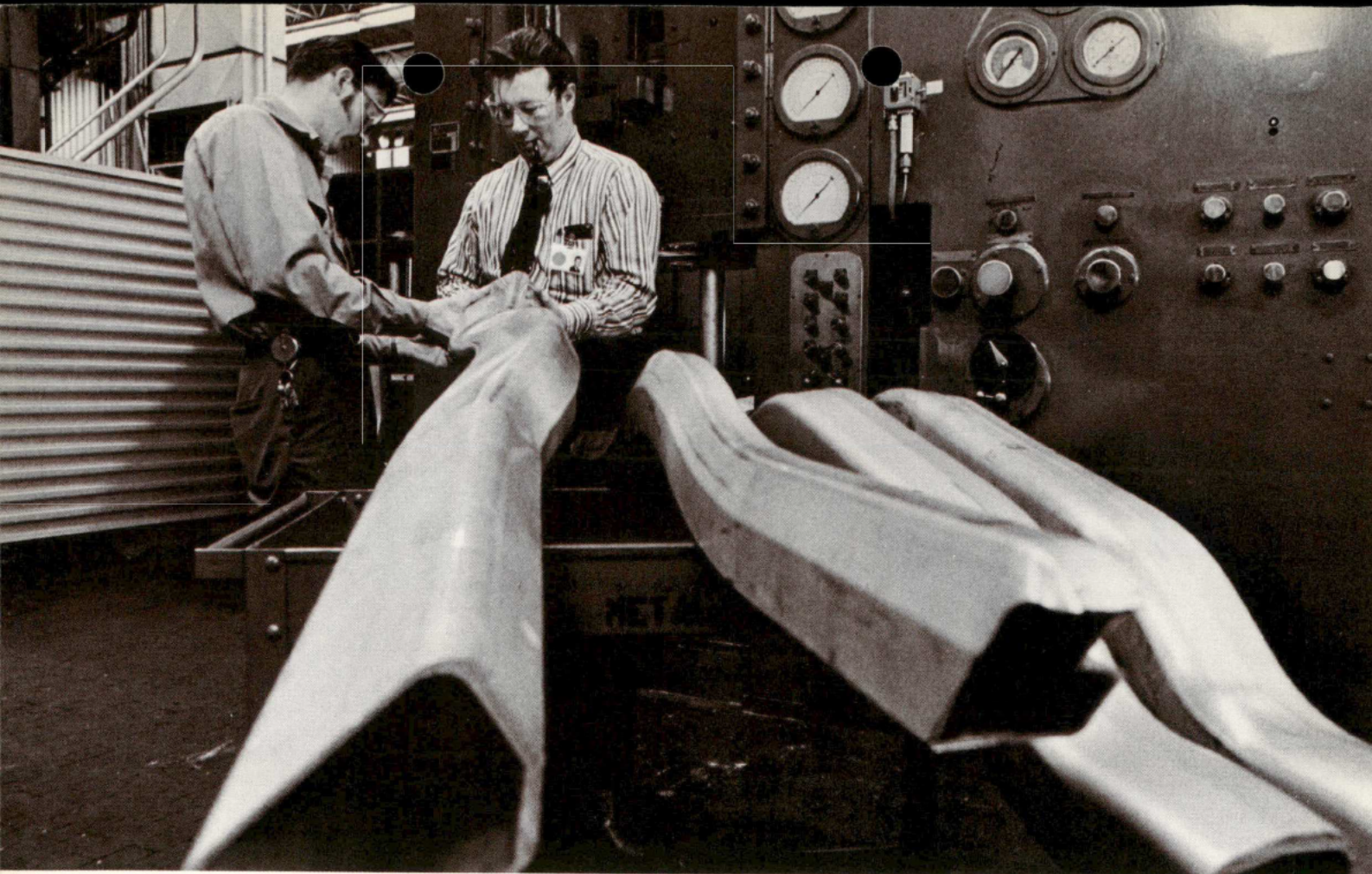


**EARL SHAW, Ingot Plant Foreman . . .** "There's more to foremanship than just directing. You have to be with the crew to accomplish what needs to get done. With the sophisticated casting machinery we have now, I try to be around when a machine is giving trouble. Training is also part of a foreman's job, and there's some training you can do, some place, every day."



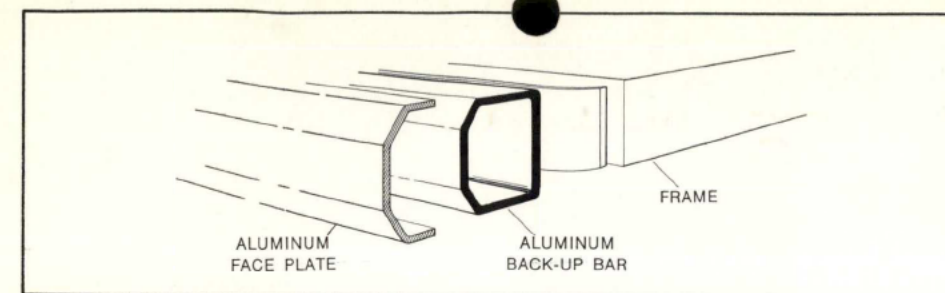
**DICK FERGUSON, Potrooms Foreman . . .** "Like everything else, you do the best job you can. An important part of foremanship is being able to organize tasks and handle people. You should be able to recognize problems and give them prompt attention. Most guys don't realize the time a foreman spends coordinating jobs with other departments as diverse as potlining, utility and the ingot plant. It takes a lot of time."





Lou Lobaugh (left), technician, and Roger Had-den, development engineer, inspect prototype extruded bumper back-up bars at the Alcoa Technical Center.

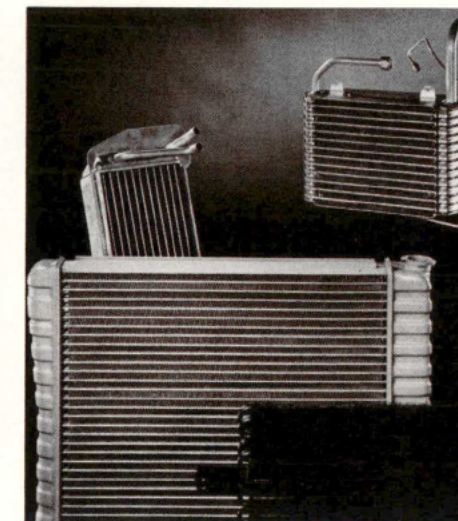
## Aluminum's Designs on the Auto



Aluminum's ability to absorb three times as much energy as steel provides a new breed of bumpers, back-up bars and supports for added safety.



There's more than a shade of difference between Alcoa's new high-luster auto trim sheet and the aluminum trim products now in use.



In automotive radiators, condensers, evaporators and heater cores, aluminum is proving itself the "quick-heat exchange artist."

Nine million autos—it's estimated—will roll off American assembly lines during 1972. On the average, each will contain 77.5 pounds of aluminum. That adds up to a big market, but it looks like this could be just the beginning.

"Prospects for increased use of aluminum in the auto have never looked better," reports Ron Hoffman, Alcoa's manager of transportation sales.

"The aluminum engine block is a solid success. Aluminum heat exchangers are standard and high-luster trim sheet is gaining acceptance. Interest in aluminum bumper systems and body sheet is picking up," says Ron.

What these new automotive markets could mean to each of us as Alcoans is the strong possibility of higher profits and

greater job security in the foreseeable future. That's why so many of us—in sales, research, production—are now working closely with auto makers to make this great potential a reality.

Take the automotive bumper, for example. Aluminum's ability to absorb three times as much energy as steel is being called into service as back-up bars on some 1973 models. Because aluminum offers a comparatively lightweight route to greater safety, it's also being looked at for future use in total bumper systems, including face plate, back-up bars and supports.

Another major area of activity is aluminum body sheet—a lightweight alternative that could help solve the auto's weight problem. Over the next few years,

new safety equipment will add pounds, which in turn will add more pounds by requiring bigger engines, heavier structural parts, etc. To reverse this situation, aluminum body sheet, despite its initial higher cost, can help save weight and dollars in framing and power systems. It can also deliver a bonus in corrosion resistance and increased scrap values.

In recent years, a lot of Alcoa effort has gone into qualifying aluminum as an eligible candidate for auto body sheet. The challenge was first confronted by developing new alloys to meet strength, formability and joining requirements of the auto makers. Next, Davenport Works took on a series of pilot production runs to evaluate these experimental alloys and come up with cost-saving fabricating practices.

The developmental effort continues—with auto body sheet as with bumper systems and the radiator.

"We know that aluminum holds a lot of promise for the auto," says Ron Hoffman. "And we're teaming up with the auto makers to create the aluminum products and processes needed to make that promise materialize in the next generation of automobiles."

An aluminum body saves weight without sacrificing strength in General Motors' Experimental Safety Vehicle. Developed for the Department of Transportation, this ESV calls more than 1000 pounds of the light metal into service, including an all-aluminum engine block.